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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,272	03/06/2002	Tomoyuki Asano	SONYJP-151	1051

7590

11/29/2005

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EXAMINER

LIPMAN, JACOB

ART UNIT

PAPER NUMBER

2134

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/980,272

Applicant(s)

ASANO ET AL.

Examiner

Jacob Lipman

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 47-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/30/01</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

2. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-46, 57, and 58, drawn to generating a key from data renewed from a node or leaf key.

Group II, claim(s) 47-56, drawn to deriving a block from a renewed node key.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group 1 renews data with a node or leaf key to generate a key, Group 2 renews the node key and encrypts it to create a key renewal block.

3. A telephone call was made to Arnold H. Krumholz on 26 September 2005 to request an oral election to the above restriction requirement. Applicant elected group 1 without traverse.

### ***Information Disclosure Statement***

4. The information disclosure statement filed 30 November 2001 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language (specifically item J). It has been placed in the application file, but the information referred to therein has not been fully considered.

***Specification***

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

6. Claim 28 objected to because of the following informalities: claim 28 depends on claim 25, but mistakenly says it depends on 15. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-46, 57, and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example "each of nodes" in line 3, "each of leaves" in line 5

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-46, 57, and 58, as best understood, are rejected under 35

U.S.C. 102(b) as being anticipated by Waldvogel in the VarsaKey Framework.

With regard to claim 1, Waldvogel discloses an information recorder (computer) including a cryptography means (new TEK) having a node key (old TEK) included in a tree structure (page 1619) in which different recorders are included s leaves (computers of group members) each having a unique leaf key (KEK, page 1619), the means generating a key based on data (the old TEK, which is hashed, 1619) which is renewed by the node key (1619).

With regard to claim 2, Waldvogel discloses each computer has the TEK and function (1619).

With regard to claim 3, Waldvogel discloses the KEK (unique key) is also renewed using the function (1619).

With regard to claim 4, Waldvogel discloses when the key is renewed; the one-way function is transmitted (KRB) so each lower member can renew their own TEK and KEK (1618-1619).

With regard to claim 5, Waldvogel discloses the one-way is encrypted with the TEK (1619) it is inherently at least temporarily stored.

With regard to claim 6, data is inherently stored at an address, which is a correlated number.

With regard to claim 7, Waldvogel discloses that only group members receive the updated key, and thus a player (computer) has a restriction by what group he is a

member of, and will use a first key if he is member of a first group, and a second key if member of a second group. (1616-1619).

With regard to claim 8, The KEK is a title unique key generated from a master key (one-way function).

With regard to claim 9, Waldvogel discloses including a token with the TEK and KEK to time stamp the keys (1625).

With regard to claims 11 and 12, the encryption used is copy control that only allows computers with the proper key to copy the data to be decrypted.

With regard to claims 13-21, 23, and 24, since Waldvogel discloses a synchronous encryption system, the decryption key is the encryption key, thus for the reasons above Waldvogel discloses each limitation of these claims.

With regard to claims 25-32, 34-43, 45, and 46, these describe the method outlined above as being performed by the information recorder.

With regard to claims 57 and 58, these describe the program medium of the recorder as outlined above.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 10, 22, 33, and 44, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldvogel.

With regard to claims 10, 22, 33, and 44, Waldvogel discloses claim 1, as outlined above, but does not mention the DES encryption algorithm. The examiner takes official notice that DES is well known in the art as a secure algorithm. It would have been obvious to one of ordinary skill in the art to use DES in the system of Waldvogel to add the additional security that DES offers.

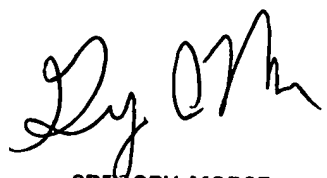
***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 571-272-3837. The examiner can normally be reached on M-Th 7 AM-3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571-272-3838. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER

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